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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,522	09/08/2003	Raymond Bertholet	88265-6925	1947

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BELL, BOYD & LLOYD LLP
P.O. Box 1135
CHICAGO, IL 60690

EXAMINER	
SILVERMAN, ERIC E	
ART UNIT	**PAPER NUMBER**
1618	

NOTIFICATION DATE	DELIVERY MODE
05/29/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATENTS@BELLBOYD.COM

Office Action Summary	Application No.	Applicant(s)	
	10/658,522	BERTHOLET ET AL.	
	Examiner	Art Unit	
	Eric E. Silverman, PhD	1618	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *09 April 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-5,7-14 and 16-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5,7-14 and 16-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Applicants' response, filed 4/9/2008, has been received. Claims 1 – 5, 7 – 14 and 16 – 19 are pending in this action.

Claim Rejections - 35 USC § 102

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

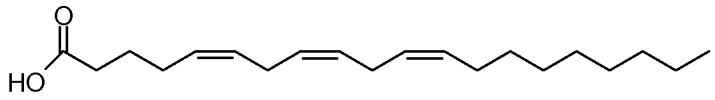
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 – 3 and 14 – 19 remain rejected under 35 U.S.C. 102(b) as being anticipated by US 6,117,905 (The 905 reference) for reasons of record and those discussed below.

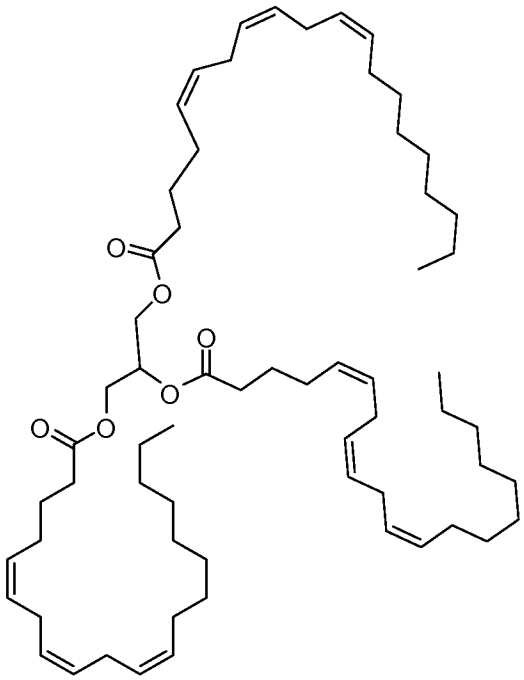
Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. Applicants first argue that claim1 requires no more than 10% by weight of long chain polyunsaturated fatty acids (LC-PUFAs). According to Applicant, the 905 reference requires 20% or more of arachadonic acid and thus fails to meet this requirement. In response, it is noted that the arachadonic acid in the 905 reference is present in the form of a triglyceride. The 905 reference at col. 6, lines 56 – 63. A triglyceride is not a LC-PUFA; it is not an acid at all, rather, a triglyceride is a tri-ester of an acid with glycerol. The 905 reference is clear that the arachadonic acid is present in the form of glycerides, primarily triglycerides. Although the reference's terminology is somewhat unusual, it is nonetheless clear that the arachadonic acid is present almost completely in the form of a glyceryl ester, and not in the form of a free LC-PUFA. The difference

between arachadonic acid and the triglyceride of arachadonic acid is shown in the diagram below.



Arachadonic Acid



Triglyceride of Arachadonic Acid

In further support of this interpretation, it is noted that the 905 reference teaches that the entire composition has less than 0.8% of unsaponifiable materials. Saponification is a process by which glyceryl esters are hydrolyzed into their component fatty acids and glycerol. Fatty acids, including LC-PUFAs, do not contain glyceryl esters (or any esters) and as such are not saponifiable. Glyceryl esters can be saponified. A composition, such as that of the 905 reference, having less than 0.8% unsaponifiable

materials must have less than 0.8% LC-PUFA, because LC-PUFAs are unsaponifiable materials.

Applicants' also aver that the 905 reference does not teach a "separate carrier oil". This argument is not well understood. The nature of the claimed "carrier oil" is not specified in the instant claims; the claims only specify that it is not the LC-PUFAs. The composition of the 905 reference is composed completely of oils. As such, the oil in 905 which is not arachadonic acid triglyceride (the only LC-PUFA in that composition) is the "carrier oil" of the instant claims. Applicant's arguments about the "use" of the carrier oil in the specification are likewise unpersuasive. Instant claims are product claims, and so long as the requisite oil is present in the product its "use" therein is irrelevant.

Claims 1 – 4 and 14 – 19 remain rejected under 35 U.S.C. 102(b) as being anticipated by WO 99/65352 ("the 352 reference") for reasons of record and those discussed below.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. Applicants first argue that claim1 requires no more than 10% by weight of long chain polyunsaturated fatty acids (LC-PUFAs). According to Applicant, the 352 reference more than 10 %of arachadonic acid and thus fails to meet this requirement.

In response, much like in the 905 reference, the 352 reference teaches that the arachadonic acid is present in the form of a triglyceride, which is different from a LC-PUFA. As discussed above, a triglyceride is an ester, not an acid, and as such

arachadonic acid triglyceride cannot be a LC-PUFA (something which is *not an acid* cannot be a long chain polyunsaturated fatty *acid*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claim 5 remains rejected under 35 U.S.C. 103(a) as being unpatentable over US 6,117,905 (the 905 reference) for reasons of record and those discussed below.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. Applicants repeat the arguments discussed above with respect to the anticipation rejection of claims 1 - 4 and 14 - 19. These arguments are unpersuasive for the reasons discussed above.

Claims 7 – 11, 13 – 16 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/21037 (the 037 reference) in view of US 4,465,699 to Pagliaro et al.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Here, Applicants' assert that neither reference anticipates the claimed invention because neither teaches use of a carrier oil to extract materials from a microorganism. While Applicants' are correct that neither reference anticipates the invention, a finding of obviousness does not require an anticipatory reference. Applicants' comments focus on the references individually, while completely ignoring what the references *in combination* teach the artisan. Applicants' do not recognize that the improvement of using carrier oils instead of organic solvents in one field, extraction of materials from vegetable products, would prompt the use of the same modification in a different field, namely extraction of materials from microorganism biomasses, if the variations are predictable. Because the process of extraction is well understood, this modification would be predictable. Applicants also fail to recognize that the instant invention is merely a substitution of oil for hexane in a known process of obtaining materials from a biomass, when oil is known in the extraction art to be a good substitute for organic solvents (such as hexane).

Claim 12 remains rejected under 35 U.S.C. 103(a) as being unpatentable over the 037 reference in view of US 4,465,699 to Pagliaro et al as applied to claims 7 – 11, 13 – 16,and 19 above and in further view of the 905 reference.

Response to Arguments

Applicants' arguments have been fully considered, but are not persuasive. Applicants have not addressed this rejection specifically, and thus it is believed that

Applicants implicitly agree that claim 12 is unpatentable for the reasons set forth in the office action mailed 1/28/2008.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric E. Silverman, PhD whose telephone number is (571)272-5549. The examiner can normally be reached on Monday to Thursday 7:00 am to 5:00 pm and Friday 7:00 am to noon.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hartley can be reached on 571 272 0616. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael G. Hartley/
Supervisory Patent Examiner, Art Unit 1618

Eric E. Silverman, PhD
Art Unit 1618